

percent. The predetermined threshold criterion may include that, for at least the threshold percentage of each day of the trial period, a breathing rate or heartbeat rate of the resident within the residence is identifiable solely using the trial monitoring data. The trial period of time may be a default value of at least seven days, and wherein said performing the confidence assessment is carried out without requiring user input. The trial period of time may be received from a user via the administrative device.

In some embodiments, a system for monitoring a resident is described. The system may include a plurality of smart home devices installed within a residence linked with a user account. The system may include an application executed by an administrator device. The system may include a cloud-based host system. The cloud-based host system may include one or more processors. The cloud-based host system may include a memory communicatively coupled with and readable by the one or more processors. The cloud-based host system, having stored therein processor-readable instructions which, when executed by the one or more processors, may cause the one or more processors to perform a confidence assessment based on the plurality of smart home devices being present within the residence linked with the user account. The resident may reside at the residence. The one or more processors may determine whether the residence is eligible for monitoring of the resident based on the confidence assessment. The one or more processors may perform a learning process over a period of time during which resident activity data is collected from the plurality of smart home devices and analyzed to create an ordinary behavior model. The one or more processors, following determining that the residence is eligible for monitoring of the resident and the learning process being performed, may provide a notification that monitoring is active. The one or more processors may monitor data received from the plurality of smart home devices to identify data indicative of behavior considered unusual based on the ordinary behavior model. The one or more processors may create an alert that identifies the behavior and identifies how the behavior contrasts with the ordinary behavior model. The one or more processors may send, to the administrator device linked with the user account, the alert that identifies the behavior and identifies how the behavior contrasts with the ordinary behavior model. The processor-readable instructions that cause the one or more processors to perform the confidence assessment include processor-readable instructions that may cause the one or more processors to identify a number of the plurality of smart home devices that are eligible to participate in the monitoring. The processor-readable instructions that cause the one or more processors to perform the confidence assessment include processor-readable instructions that may cause the one or more processors to identify a second number of the plurality of smart home devices that are eligible to participate in the monitoring and are power-constrained devices.

Additionally or alternatively, embodiments of such a system may include one or more of the following features: The processor-readable instructions may be configured to cause the one or more processors to, in response to the monitoring being activated, activate a process at each power-constrained smart home device of the plurality of smart home devices that defines one or more rules indicative of when data indicative of a behavior of the resident should be stored for periodic scheduled transmission to a monitoring server system or the data indicative of the behavior of the resident should be transmitted immediately to the monitoring server system. The processor-readable instructions that

cause the one or more processors to perform the confidence assessment include processor-readable instructions that may cause the one or more processors to provide a questionnaire to the administrator device linked with the user account. The questionnaire may require that a user of the administrator device identify a specific location of each smart home device of the plurality of smart home devices with the residence. The questionnaire may require that a user of the administrator device identify a plurality of types of worrisome scenarios of which the administrator user desires to be notified. The processor-readable instructions that cause the one or more processors to perform the confidence assessment may include processor-readable instructions that cause the one or more processors to provide the questionnaire to the administrator device linked with the user account. The questionnaire may require that a user of the administrator device provide an indication of a number of residents that live in the residence. The questionnaire may require that a user of the administrator device provide an indication that no cats or dogs live with the resident. The processor-readable instructions that cause the one or more processors to perform the confidence assessment include processor-readable instructions that may cause the one or more processors to calculate a confidence metric based on the number of the plurality of smart home devices that are eligible to participate in the monitoring. The processor-readable instructions may cause the one or more processors to calculate a confidence metric based on the second number of the plurality of the smart home devices that are eligible to participate in the monitoring and are power-constrained. The processor-readable instructions may cause the one or more processors to calculate a confidence metric based on the responses to the questionnaire received from the administrator device. The processor-readable instructions may cause the one or more processors to calculate a confidence metric based on comparing the calculated confidence metric to a confidence metric threshold. The plurality of smart home devices are selected from the group consisting of: a smart home smoke detector; a smart home carbon monoxide detector; a smart indoor security camera; a smart outdoor security camera; a smart thermostat; a smart home assistant device; a smart security system; a smart window/door sensor; a smartphone; and a smart doorbell device. The system may output the alert.

In some embodiments, a non-transitory processor-readable medium comprising processor-readable instructions is described. The processor-readable instructions may cause the one or more processors to perform a confidence assessment based on a plurality of smart home devices being present within a residence linked with a user account. The resident may reside at the residence. The one or more processors may be caused by the instructions to determine whether the residence is eligible for monitoring of the resident based on the confidence assessment. The one or more processors may be caused by the instructions to perform a learning process over a period of time during which resident activity data is collected from the plurality of smart home devices and analyzed to create an ordinary behavior model. The one or more processors, following determining that the residence is eligible for monitoring of the resident and the learning process being performed, may be caused by the instructions to provide a notification that monitoring is active. The one or more processors may be caused by the instructions to monitor data received from the plurality of smart home devices to identify data indicative of behavior considered unusual based on the ordinary behavior model. The one or more processors may be caused by the